

DEPARTMENT OF THE ARMY PERMIT

Permittee: Cargill Salt Division

Permit No. 19009S98

Issuing Office: Department of the Army
San Francisco District
211 Main Street
San Francisco, California 94105-1905

The District Engineer, U.S. Army Corps of Engineers (Corps), San Francisco District, hereby issues a Department of the Army permit for certain structures and work occurring in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the Corps of Engineers, San Francisco District.

Project Purpose: To sustain operation and production of the solar salt facilities in the south San Francisco Bay.

Project Location: Activities described below will occur in San Francisco Bay and various sloughs and creeks in the cities of Hayward, Union City, Fremont, Newark, San Jose, Sunnyvale, Mountain View and Redwood City, in Alameda, Santa Clara and San Mateo Counties respectively, California.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Activities including operation, repair, and new construction associated with the production of solar salt in the southern portion of San Francisco Bay.

The following activities would be covered under this permit.

1. Repair, replacement and servicing of existing facilities¹. These will not require Corps of Engineers specific approval as described in 2., below.

a) Repair and replacement of existing bay intake structures, brine control structures, and related facilities such as pumps, gates, pipelines, siphons, open channels and culverts. Removal of silt and algae. Excavated material shall be placed in an identified upland area unless specified otherwise in the advanced notification.

b) Excavating, clearing and retrenching of existing intake structures and brine conveying ditches so long as the existing configuration is not altered substantially. Excavated material shall be disposed onto levee tops above the plane of the high tide, or hauled off-site to a non-jurisdictional area.

¹. Some of the repair and replacement activities could be authorized by nationwide permit #3. For the sake of expediency and permit streamlining, they are also included here, since this permit is valid for 10 years.

- c) Repair and replacement of existing bridges, bridge foundations and abutments within the network of salt pond levees.
- d) Repair and replacement of other items such as existing fences, tide gates, siphons in non-tidal areas, powerlines, etc., provided such repair and maintenance does not deviate from the plans of the original facility.
- e) Repair of existing authorized reaches of riprap. The authorized riprap areas are designed to have approximately 4:1 slope. If additional work would exceed the existing reach by 10 linear feet, then the proposed design should be submitted in accordance with the procedures for new work in the riprap section 2 h) below.
- f) Spot repairs and rehabilitation of crystallizer beds. This work will be accomplished with land based equipment.

2. Ongoing and new work:

The following activities require site specific review and approval by the Corps of Engineers in consultation with the U.S. Fish and Wildlife Service (USFWS), the U.S. Environmental Protection Agency (USEPA), the California Department of Fish and Game (CDFG), the San Francisco Bay Conservation and Development Commission (BCDC), and the San Francisco Bay Regional Water Quality Control Board (RWQCB), (all collectively referred to as "the Agencies"), pursuant to the notification procedure described in special condition 3, and in accordance with the Best Management Practices (BMPs) referenced in special condition 1 below.

- a) Placement of dredged and fill material on the pond side of salt pond levees including replacement of the eroded beach below the plane of high water in the pond for the purpose of raising and fortifying the levees to prevent degradation (see Sheet 8). The material, either dredged mud from the salt pond or imported fill, will be placed along the inside and the top of the salt pond levee in accordance with the BMPs. Alternatively, where possible, slough mud from outside the ponds may be used if the dredge has sufficient reach.
- b) Dredging of existing and new borrow ditches within the salt ponds for the purpose of placing the dredged material on existing levees. This will be performed most commonly by a floating clamshell dredge referred to as the Mallard, but also may be accomplished using a dragline or barge mounted dredge. A generalized cross section of a typical salt pond and levee system to be dredged is represented on Sheet 8.
- c) Dredging in salt ponds to allow the floating dredge to cross a pond, with the placement of dredged material on the pond bottom along the side of the dredged channel.
- d) Dredging of and placement of dredged material at 38 existing dredge locks, and at any newly constructed authorized dredge locks, to allow the Mallard to access the salt ponds. Advanced notification for these activities shall include specific quantities of material to be dredged and placed, and drawings indicating prestaked, designated areas for stockpiling, sidecasting and borrowing material. The use of dredged locks shall be specifically approved case by case, and follow the BMPs. This work includes:
 - i dredging an access channel about 40 to 50 feet wide and up to approximately 350 feet long through salt marsh vegetation or mud flats from a slough to a lock levee and breaching the levee;

- ii if the access channel is greater than 60 feet in length, temporarily sidecasting dredged material onto a preapproved area adjacent to the access cut;
- iii if the access channel is less than 70 feet, temporarily storing dredged material on the lock or salt pond levee, or designated (pre-approved) stockpile area. If between 60 and 70 feet, the material may be placed in either area;
- iv breaching approximately 200 to 400 cubic yards of the dredge lock levee for dredge entry into the lock basin and placing the breached material in a designated stockpile area, and moving dry stockpiled material from past lock entries into the breached area to dam the lock;
- v dredging up to approximately 2,000 cubic yards of accumulated sediment within the basin of the lock and placing the material on the inside and top of the lock levee, on adjacent salt pond levee, or into the adjacent salt pond;
- vi breaching approximately 400 to 1000 cubic yards from the main salt pond levee for the dredge to enter the salt pond. Breached levee material, stockpiled from the last time the lock was accessed atop the main levee will be used to dam the breach following entry.
- vii upon dredge exit, breaching and plugging levees in a similar fashion to that described above. The salt marsh muds that were excavated and sidecast in the access cut will be retrieved and placed back into to the access cut and channel, closing it behind the dredge.
- viii upon dredge exit, inserting a small culvert in to the lock at an elevation that will allow appropriate circulation of high tides into the lock basin to prevent the accumulation of undesired sediments.

e) Dredging within shallow sloughs to provide up to four feet of clearance for access by the Mallard. Examples include Mowry Slough to allow the floating dredge access to dredge locks Plant 2, ponds 6 and 7, within Albrae Slough to access Plant 2 locks 3 and 4, within Ravenswood Slough to access lock RCW 3, and within Charleston Slough to access lock A1. Dredged material that cannot be placed on salt pond levees may be placed on bare mud flats following approval in accordance with the notification procedure. Some slough dredging may also be performed near dredge locks for the purpose of obtaining additional mud to bring the access cut fills to the desired elevation following exit by the Mallard (see Attachment A, 5).

f) Installation of new intake and brine control structures, new pumps, siphons, culverts, power transmission lines channels/ditches, crossings of channels and streams, in conjunction with new work, or relocation of existing structures.

g) Construction of new pumping donuts, internal coffer dams, and internal salt pond levees.

h) Placement of new riprap made up mostly of small pieces of demolition rubble (broken concrete slabs) along outboard and inboard levees as needed to fortify the slopes and prevent erosion, *so long as the permittee has adequately demonstrated that the proposed new riprap is the least damaging, practicable alternative available to prevent levee erosion.* Riprap will be placed below the high tide line and/or high pond level at a slope of about 4:1 where needed, as illustrated on Sheet 9, taking care to minimize the number of voids between the rubble that might be utilized by red foxes. Riprap placed on top of non-eroding salt marsh is not authorized.

i) Repair and replacement of siphons that cross salt marsh, sloughs and channels that would require extensive trenching and sidecasting mud.

j) Dredging and placement of bay muds into eroded areas along selected outboard levees with the purpose of encouraging the establishment and expansion of salt marsh vegetation to diffuse wave energy and prevent levee erosion. The quantities of dredged material to be moved will vary greatly depending on site specific conditions and will be included in the notification procedures. The desired height of the constructed mounds will approximate the high tide elevation (see Sheet 13).

k) Dredging a "sump" approximately 75 feet by 75 feet by 2 1/2 feet deep, in the mud flat of a slough in the immediate vicinity of a staked access cut to a dredge lock, placing the dredged mud on an adjacent levee (within reach of the Mallard). The "sump" will serve as a receptacle for excess dredged material from cutting the access channel. This authorization is for Best Management Practice 3, described in Attachment A.

Permit Conditions:

A. General Conditions:

1. The time limit for completing the work authorized ends on July 31, 2005. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

B. Special Conditions:

1. The permittee shall perform all of the activities described above in accordance with the Best Management Practices (BMPs) described in Attachment A. Any specific exceptions to these

practices shall be described case by case in the Final Notification of the annual work plan, described in special condition 3 below, and receive Corps of Engineers approval.

2. In addition to the BMPs, the permittee shall apply the precautionary measures, work restrictions, and mitigation activities pursuant to special conditions a through k that correspond to the Mitigation Matrix included as Attachment B. These conditions are to ensure that potentially adverse impacts to endangered species and other sensitive natural resources are minimized or avoided as much as possible. A description of the specific implementation of these measures shall be included in both Advanced and Final Notifications and Reporting submittals described below, on a site by site basis.
3. The permittee shall circulate an **Advanced Notification** of proposed work to the interested parties, and will provide descriptions of all activities listed in Section 2 above, that are proposed for the next annual work period of June 1 through May 31. The permittee shall be responsible for distributing the notification to the Corps of Engineers, BCDC, USFWS, CDFG, RWQCB, USEPA ("the Agencies"), and other interested parties retained on a list specific to this permit (referenced here as "the Public"), by 31 August of the previous year. This submittal shall include the following:
 - a) A general list and description of the both new and ongoing work proposed for the upcoming annual work period. Among the submitted materials will be a site map indicating the locks to be accessed, channels, sloughs and ponds to be dredged, levees to be topped, any new facilities to be installed, etc. and approximate time sequence in which work will be accomplished.
 - b) A list of special status species as addressed in the Mitigation Matrix in Attachment B, that are either known to be present or that could occur in the areas where work is proposed, and the surveys that will be performed in accordance with the requirements in Attachment B. This section should also include proposed measures that will be taken to reduce and/or avoid impacts to known species.
 - c) A report that describes the work that was accomplished during the previous annual work period, what measures were performed to reduce adverse impacts and whether they were successful. The report should also summarize the results of any survey data that were obtained during the previous year.

Comments following review of these materials will be submitted to the Corps of Engineers by October 1. The Corps of Engineers will consolidate these comments along with their own and make a good faith effort to send them to the permittee on or around November 1. Any changes in the proposed workplan or additional sampling or work that may be required, will be addressed at this time, and incorporated into the Final Notification submittal described below.

4. The permittee shall provide the Corps of Engineers, the Agencies, and the Public with a **Final Notification** of the proposed annual work plan, that will include detailed descriptions of all activities listed in Section 2 above and possibly some newly identified work, that is proposed for the upcoming annual work period, no later than March 1. This document will describe the work that requires Department of the Army approval, and include the following:
 - a) Complete descriptions of all proposed work described in Section 2 above. The notification shall include:

- i a regional map indicating the locks to be accessed, proposed levees to be topped, location of new facilities to be constructed or repaired, etc.
 - ii a project description that includes estimated quantities of material to be dredged and material to be used for fill, and the estimated aerial or lineal extent of the dredging and placement of fill material in square feet or lineal feet as appropriate for activities such as stockpiling or levee topping respectively.
 - iii a description of how the work will be accomplished, including equipment required,
 - iv a description of the time period in which each activity is proposed to be performed.
- b) A list of special status species known to be present and proposed measures to reduce and/or avoid impacts to these species, pursuant to the attached Matrix. This must take into consideration any data collected during surveys or other new species specific information that becomes available.
- c) During the notification period, the permittee shall stake for agency review, the lock access channel, sediment placement areas and areas proposed for stockpiles in the area of a lock proposed for use.

It is advised that a preliminary draft work plan be sent to the Corps prior to March 1 so that the Corps may review the plan for completeness in reporting detail. If the proposed work plan is not complete (i.e., does not contain the required information described above), the Corps will promptly inform the permittee of its deficiencies. Once the supplementary information is received and work plan is considered complete, the Corps will ask the permittee to send copies to the Agencies and Public, for a 30 day review.

The proposed annual work plan will be reviewed for conformance with the terms and conditions of this permit. Activities beyond the scope of this permit, or not specifically authorized here, will require specific authorization through a separate permit application.

No work may commence without activity-specific written approval from the Corps of Engineers. Comments on the proposed annual work plan will be submitted to the Corps no later than 30 days after they have received the Final Notification of the complete annual work plan. The Corps shall make every effort to provide written approvals to the permittee for all proposed actions prior to May 31. If the Corps is not able to issue written approval for activities by that date, we will make a good faith effort to issue approval for as many activities as possible on or before that date, and resolve any outstanding issues for separate approval as early as possible after that date.

If approval of the proposed work plan is delayed by objections, the Corps will convene a meeting to try to resolve the objections within 30 days. The District Engineer shall have the final approval authority for the proposed plan.

5. At the culmination of the fifth year of performing activities authorized in this permit, the permittee shall submit a report to the Corps that summarizes the work completed in the first five years, a monitoring report on impacts to special status species, and a appraisal of how well the Best Management Practices are working with respect to consistent, effective application, and minimizing project impacts. The Corps will review this report in consultation with the Agencies and may require modifications to the permit if a more effective practice or condition to avoid or minimize impacts to habitat or sensitive species is identified.

7. The permittee shall conduct a demonstration project in which dredging will be performed and the effect on mercury concentrations in clapper rail prey items will be monitored, pursuant to the sampling regime described in Attachment "C". If the mercury concentrations in prey items sampled after a dredging event are not significantly greater than those in prey sampled preceding a dredging event, then no additional mercury testing will be needed for the duration of the permit. Once the sampling and analyses are complete the permittee shall send the results to the Agencies for review and comment. The Corps, in consultation with the Agencies, will determine whether the tests are complete and no additional testing need be required, or whether additional sampling and testing is needed to obtain more information.
8. The permittee shall also evaluate sediments sampled from salt pond levees around the south Bay. This analysis shall compare mercury concentrations in three selected levees with mercury concentrations in adjacent intertidal sediments pursuant to the sampling procedure described in Attachment "C". If mercury concentrations on the levee are less than or equal to the intertidal mercury concentrations, the conclusion will be that levee topping does not cause a mercury problem and further testing will not be required. If levee concentration are significantly higher than those in intertidal sediments, then a prey item demonstration project similar to that described above may be required. If the tests are inconclusive, the testing regime may need to be redesigned and re-executed, as determined by the Corps in consultation with the Agencies.
9. The permittee may construct new dredge locks for the purpose of avoiding adverse impacts to California clapper rails from using the existing ones, pursuant to item "C" in the Matrix in Attachment B. Any new locks will be situated adjacent to salt pond levees at a location proposed by the permittee and approved by the Corps in the Final Notification procedure.

For approval, the permittee shall submit scale drawings of the proposed lock along with vicinity maps and an explanation as to why the proposed location is less environmentally damaging. Impacts to salt marsh from the construction of the new dredge lock will not require compensatory mitigation, nor will its use require further surveys or restrictions on use. The construction of the new dredge lock shall be in conjunction with the abandonment of a corresponding currently serviceable lock, which will be entered and exited one more cycle in order to construct the new lock. Locks under consideration for abandonment/new construction include the locks at ponds A1, A7, A20S-A19S, Plant 2 lock 12.

10. To offset the impacts to salt marsh and endangered species habitat of ongoing work, the permittee shall restore 49 acres of salt pond in Pond 1 of the Baumberg pond complex to fully tidal salt marsh habitat, capable of supporting California clapper rails, salt marsh harvest mice and other salt marsh species. The permittee shall implement the restoration, maintenance and monitoring procedures described in Attachment D, the compensatory mitigation plan entitled, "Salt Evaporator Pond B-1 Tidal Marsh Restoration, Cargill Salt Company Maintenance Activities in San Francisco Bay", dated July 1995.
11. At the culmination of the 10 year maintenance and monitoring obligation for the mitigation site, the permittee shall contact the Corps of Engineers to schedule an on-site compliance inspection and/or a meeting to collectively (with interested Agencies) review the monitoring materials and aerial photographs. In addition to the success criteria described in Attachment D, the success of the compensatory restoration effort will be based on observed drainage densities within the developing mitigation area. Drainage densities will be assessed from the recent aerial photographs and compared to those of similar salt marsh restoration sites, such as Outer Bair Island and Cogswell marsh, in a comparable age of development. Most of the monitoring data should demonstrate that there is active growth, and recruitment of salt marsh habitat that indicate that it will mature to habitat comparable to and contiguous with Whales Tail Marsh. If

the success criteria are not met, contingency measures will be required by the Corps and implemented by the permittee, with extended monitoring and maintenance obligations. When the Corps determines that the success criteria have been satisfied, they will issue a letter confirming that the permittee is relieved of further obligation of maintenance and monitoring on this site.

12. In the event that an unforeseen emergency requires work of the type authorized in this permit to be performed without going through the normal notification procedures, the permittee shall notify the Corps and the Agencies as soon as is practicable, of the situation and the proposed activities using a format similar to that described under special condition #3. The Corps will promptly acknowledge receipt of the permittee's request verbally after it is received, and issue a written response to the permittee's request after consultation with the Agencies. The permittee assumes the risk of permit violation in undertaking work prior to approval. Detailed descriptions and results of activities performed under this abbreviated review shall be included in the annual report. Work in excess of what could reasonably be expected to address the urgent situation may be considered a violation of the permit. Agency staff shall be granted immediate access to the affected areas.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
 - a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
 - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
- a. You fail to comply with the terms and conditions of this permit.
 - b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

Robert C. Douglas 10 July 95
(PERMITTEE) (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

[Signature] 10 July 95
(DISTRICT ENGINEER) (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree) (DATE)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Alameda

On July 10, 1995 before me, Jane Swift

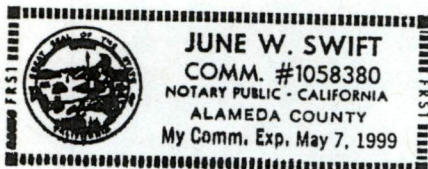
DATE

NAME, TITLE OF OFFICER, E.G., "JANE DOE, NOTARY PUBLIC"

personally appeared Robert C. Hinglass Manager Real Property

NAME(S) OF SIGNER(S)

☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Jane W. Swift
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☒ INDIVIDUAL Manager Real Property
☐ CORPORATE OFFICER

TITLE(S)

☐ PARTNER(S) ☐ LIMITED
☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:

NAME OF PERSON(S) OR ENTITY(IES)
Cargill Salt

DESCRIPTION OF ATTACHED DOCUMENT

U.S. Corp of Engineer
TITLE OR TYPE OF DOCUMENT
Permit 19009-98

9

NUMBER OF PAGES

July 10, 1995
DATE OF DOCUMENT

District Engineer
SIGNER(S) OTHER THAN NAMED ABOVE

1. Name of the person or organization to whom the property is being transferred: _____

2. Name of the person or organization from whom the property is being transferred: _____

3. Description of the property being transferred: _____

4. Date of the transfer: _____

5. Signature of the person or organization receiving the property: _____

6. Signature of the person or organization transferring the property: _____

7. Notary Public for the State of _____

OPTIONAL FORM NO. 10 (REV. 10-6-95)

1. Name of the person or organization to whom the property is being transferred: _____

2. Name of the person or organization from whom the property is being transferred: _____

3. Description of the property being transferred: _____

4. Date of the transfer: _____

5. Signature of the person or organization receiving the property: _____

6. Signature of the person or organization transferring the property: _____

7. Notary Public for the State of _____